

**Amendments to the Claims:**

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-15. (Previously Canceled)

16. (Currently Amended) [[A]] An aluminum conductor composite core reinforced cable as recited in Claim 30, comprised of:

~~a matrix material, the matrix material further comprising:~~

~~a chemical formulation comprising at least a resin, at least one hardener and one or more accelerators, said formulation having elongation properties in excess of glass fiber elongation properties; and~~

~~a plurality of longitudinally extending fibers of one or more fiber types embedded in the matrix material to form a fiber/resin matrix;~~

wherein, the fiber/resin matrix is cured at a curing temperature of from about 350°F to about 500°F to form the composite core.

17-19. (Canceled Herein)

20. (Currently Amended) [[A]] An aluminum conductor composite core reinforced cable as recited in Claim 34 according to claim 17, wherein the composite core comprises carbon fibers surrounded by glass fibers, the core having a carbon/glass fiber ratio that produces a composite core having a predetermined set of mechanical properties.

21-25. (Canceled Herein)

26. (Currently Amended) [[A]] An aluminum conductor composite core reinforced cable as recited in Claim 30 according to claim 16, further comprising a protective coating surrounding the core.

27-28. (Canceled Herein)

29. (Previously Presented) [[A]] An aluminum conductor composite core reinforced cable as recited in Claim 30 as recited in Claim 16, wherein the matrix material has an elongation of greater than about 3%.

30. (Previously Presented) An aluminum conductor composite core reinforced cable, comprising:

a composite core comprising a matrix material, the matrix material further comprising:

a chemical formulation comprising at least a resin, at least one hardener and one or more accelerators, said formulation having elongation properties in excess of glass fiber elongation properties; and

a plurality of longitudinally extending fibers of one or more fiber types embedded in the matrix material to form a fiber/resin matrix;

wherein, the fiber/resin matrix is cured to form the composite core; and

one or more layers of aluminum conductor surrounding the core.

31. (Previously Presented) An aluminum conductor composite core reinforced cable according to Claim 30, wherein the one or more layers of aluminum conductor surrounding the core comprise an aluminum conductor helically wound around the core.

32. (Previously Presented) An aluminum conductor composite core reinforced cable according to Claim 30, wherein the composite core comprises two or more fiber types.

33. (Previously Presented) An aluminum conductor composite core reinforced cable according to Claim 32, wherein one fiber type is glass.

34. (Previously Presented) An aluminum conductor composite core reinforced cable as recited in Claim 32, wherein one fiber type is carbon.

35. (Previously Presented) An aluminum conductor composite core reinforced cable according to Claim 30, wherein the composite core comprises one fiber type having a modulus of elasticity in the range of about 6 to about 15 msi.